

**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

**PAMELA M. BALLARD,**

**Plaintiff,**

**v.**

**ZIMMER, INC.,**

**Defendant.**

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**No. 11 C 6786**

**Judge Rebecca R. Pallmeyer**

**MEMORANDUM OPINION AND ORDER**

Plaintiff Pamela Ballard brings this products liability action against Defendant Zimmer, Inc., alleging that her hip replacement had a manufacturing defect, which caused severe injuries to her femur and surrounding muscles. She presented the opinions and testimony of Dana J. Medlin, Ph.D. in an initial report. One day before the court-ordered deadline for dispositive motions, Plaintiff filed a supplemental expert disclosure. The next day, Zimmer moved to exclude all of Dr. Medlin's testimony and opinions [44], arguing that his methodology is unreliable. Zimmer also moved for summary judgment. In response to these two motions, Plaintiff submitted two additional affidavits from Dr. Medlin, presenting new opinions in response to Zimmer's expert report. Zimmer moves to strike those affidavits [68] as untimely and argues alternatively that, even if the court considers them, they are unreliable and should be excluded along with the remainder of Dr. Medlin's testimony.

Currently before the court are Zimmer's motion to strike the two affidavits and its motion to exclude the remaining testimony of Dr. Medlin. The court disagrees with Zimmer that considering the disputed affidavits would be prejudicial and denies the motion to strike. The court, however, cannot conclude on the current record whether the methodology employed in Dr. Medlin's affidavit in response to the motion for summary judgment is reliable and requires a hearing before it will determine whether the affidavit is admissible under Federal Rule of Evidence 702.

## **BACKGROUND**<sup>1</sup>

Pamela Ballard suffered degenerative arthritis in her hip and underwent hip replacement surgery in 2003. (Pl.'s Resp. to Def.'s Local R. 56.1 Statement [53], hereinafter "Pl.'s Resp. to Def.'s SOF," ¶ 2.) Her doctor implanted a Zimmer-manufactured VerSys Hip System Femoral Head ("Head") and a VerSys Hip System Beaded Fullcoat Femoral Stem ("Stem"). (*Id.* ¶ 2.) The outside of the Head is spherical; it replaces the rounded head of the patient's femur, which fits into the hip socket, and the bottom of the Stem attaches to the patient's femur. (Medlin Dep., Ex. A to Pl.'s Resp. to Mot. to Exclude [55-1], hereinafter "Medlin Dep.," 15:25–16:8, 100:17–19.) The Head and the Stem fit together to form a "modular junction." (Mem. of Law in Supp. of Zimmer Inc.'s Mot. for Summ. J. [41], 2.) The interior of the Head is a hollow cone formed in such a way that the cone-shaped Stem will fit inside it. (Medlin Dep. at 66:13–67:3.) As Dr. Medlin explained in his deposition, the Head sits on top of the Stem and the two are pressed together so that friction holds the components together: how tightly the two pieces fit together is referred to as the "press-fit." (*Id.* at 65:19–25.) The press-fit is based on how similar the dimensions of the Head and Stem are: there will be a better fit and a more even distribution of weight on the junction if the diameter of the Stem matches the diameter of the interior of the Head, and if the angles of Stem and interior of the Head are the same, so that the two pieces fit closely together. A better press-fit leads to a more stable hip, but when inadequate, microscopic movement ("micro-motion") of the Stem inside the Head can result. (Dana J. Medlin Investigative Report, Ex. I to Zimmer Inc.'s Statement of Undisputed Facts in Supp. of Its Mot. for Summ. J. [43-9], hereinafter "Medlin Rep.," 3.) Some amount of micro-motion is inevitable with modular junction implants (Medlin Dep. at 133:12–134:13), but severe micro-motion can cause the Stem to rock inside the Head with enough force that, over time, small

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<sup>1</sup> The court does not address Zimmer's motion for summary judgment in this Memorandum Opinion and Order, but draws relevant background information from the Statements of Facts submitted as part of the parties' summary judgment briefing. (See Zimmer's Statement of Undisputed Facts [43], hereinafter "Zimmer's SOF"; Pl.'s Resp. to Def.'s Local R. 56.1 Statement [53].)

amounts of metal wear off, potentially causing corrosion. (Medlin Rep. at 3; Medlin Dep. at 115:12–117:5.)

After her surgery, Plaintiff successfully completed physical therapy, and for several years was able to exercise regularly, travel, and hike. (Pl.'s Resp. to Def.'s SOF ¶¶ 5–7.) In October 2009, Plaintiff's hip dislocated. (Pl.'s Resp. to Def.'s SOF ¶ 8.) After a second dislocation in December 2009, her doctor decided to remove part of the implanted prosthetic. (Pl.'s Resp. to Def.'s SOF ¶¶ 10, 11.) It is undisputed that removing the Stem would have risked extensive damage to Mrs. Ballard, including possible bone death; the Stem, therefore, remains implanted in Plaintiff's body and is unavailable for inspection. (*Id.* ¶ 12.) Plaintiff brought this suit, alleging that her hip implant suffered from a manufacturing defect that caused her injuries. (See Compl., Ex. A to Notice of Removal [1-1].)

#### **I. Plaintiff's expert's initial report and deposition**

Plaintiff's expert disclosures were due by April 15, 2013 (Jan. 30, 2013 Minute Entry [33]), and on that day, Plaintiff disclosed the report of Dana J. Medlin, Ph.D. Dr. Medlin is a senior consultant at Engineering Systems, Inc., a professional engineering consulting firm. (Pl.'s Resp. to Def.'s SOF ¶ 53.) He has over 20 years of experience in metallurgical, materials, and biomedical engineering—including five years at Zimmer in its materials research group. (*Id.*) While at Zimmer he focused on metals research, developing new materials to be used in Zimmer's various implants. (Medlin Dep. at 29:12–15.) He also worked on a hip implant project and some knee projects. (*Id.* at 31:10–15.) Most of Dr. Medlin's experience is with hips and knees, but he has knowledge of the materials that are used to develop implants for other parts of the body, as well. (*Id.* at 31:25–32:6.)

Dr. Medlin concluded, based on his examination of the explanted Head, that there was evidence that the Stem rocked back and forth inside the Head at a microscopic level, which caused the metal of the inside of the Head to wear off ("fretting") and resulted in corrosion damage to the interior of the Head. (Medlin Rep. at 3, 8.) To reach his conclusion, Dr. Medlin

conducted a visual examination of the Head, using various levels of magnification. (*Id.* at 3–7.) First, he noted that the interior of the Head (where the Stem fits in) had "two large thumbnail shaped scars on diametrically opposed sides of the internal taper," indicating, to him, that the Stem rocked back and forth inside the Head causing wear to the interior of the Head. (*Id.* at 3.) He also observed that the scars were located closer to the opening at the bottom of the Head, and from that observation, he determined that "the proximal [deeper] region of the bore [Head] had better fixation on the trunnion [Stem] than the distal region [towards the opening]." (*Id.* at 4.) This discrepancy in fixation "caused micro-motion (rocking) and fretting at the opening of the bore." (*Id.*) Dr. Medlin next inspected the interior of the Head using a scanning electron microscope at various levels of magnification to examine the damage to the Head. (*Id.* at 5.) This examination showed evidence of corrosion, which Dr. Medlin opined was due to metal ions released into Plaintiff's body from the metal that had worn off the interior of the Head. (*Id.* at 7.)

After identifying micro-motion as the source of the damage to the Head, Dr. Medlin concluded that the cause of the micro-motion itself was a "mismatch in the taper angle and/or diameter between the" Head and Stem. (*Id.* at 8.) That is, the two components were not close enough in their respective dimensions, which caused the Stem to rock inside the Head and cause wear to the metal. (*Id.* at 8.) Dr. Medlin proposed two possible explanations for the cause of the mismatch between the dimensions of the Head and Stem: One possibility is that the Head and Stem's diameters were both within Zimmer's design specifications, but at the extreme ends of Zimmer's permissible ranges for the dimensions: "[F]or example matching a [Stem] at the smallest diameter tolerance to a [Head] with the largest diameter tolerance may develop in a micro-motion condition that can result in fretting wear and corrosion." (*Id.* at 7.) The other possibility is that, because "[o]nly 14 of the 100 heads in this lot were inspected" for the diameter dimensions and taper angle, there was the potential for manufacturing error which "may leave some of these components outside the required tolerance range," that is, outside of Zimmer's specifications. (*Id.* at 8.) For example, even if the Stem was within specification, the

Head may have been outside of the required specifications, creating a mismatch between the Stem and Head.

At his deposition, on May 8, 2013, Dr. Medlin clarified that he did not take any measurements of the inside of the Head because he did not have the correct equipment. (Medlin Dep. at 50:19.) He also opined that, given the significant amount of damage to the interior of the Head, any measurements taken of the explanted Head would not reliably gauge the pre-implantation measurements. (Medlin Dep. at 56:15–19.)

## **II. Defendant's expert**

Defendant's expert disclosures were due May 20, 2013, and Defendant disclosed the report of Dr. Steven Kurtz.<sup>2</sup> (Zimmer Inc.'s Mem. in Supp. of Mot. to Strike Medlin Affs. [69], hereinafter "Def.'s Mem. in Supp. of Mot. to Strike,," 1.) Dr. Kurtz has a Ph.D. in Mechanical Engineering from Cornell University and is the Director of the Biomedical Engineering practice at Exponent, Inc. an engineering and scientific consulting firm. (Zimmer's SOF ¶ 41.) He is also the Director of the Implant Research Center at Drexel University's School of Biomedical Engineering, Science, and Health Systems. (*Id.*) Dr. Kurtz performed a visual examination similar to the one performed by Dr. Medlin, including basic visual observation and microscopy, but also used a tool called a Talyrond 585 to measure the radius of the inside of the explanted Head. (Steven M. Kurtz Expert Report, Ex. F to Zimmer Inc.'s Statement of Undisputed Facts in Supp. of Its Mot. for Summ. J. [43-6], hereinafter "Kurtz Rep.," 11.) Using the Talyrond, he measured the radius of the explanted Head at six different locations along its vertical axis, at 1.9 millimeter intervals. (*Id.*) When measuring the radius, Dr. Kurtz excluded the sections of the Head that were most damaged. (*Id.*) The Talyrond fitted a circle to the remaining sections of the Head and measured the radius of the best-fit circle. (*Id.*) According to Dr. Kurtz, this is a reliable method for measuring the pre-implantation dimensions of the Head. (Kurtz Dep., Ex. A

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<sup>2</sup> Defendant also presented the opinion of Dr. Joyce Tsuji, a toxicologist, but her report does not discuss Dr. Medlin's report and, accordingly, is not relevant to the motion to strike or motion to exclude.

to Pl.'s Resp. to Def.'s Mot. to Strike [74-1], hereinafter "Kurtz Dep.," 139:5–18, 156:3–21.) He took his six radii measurements and plotted them according to their vertical height to recreate the cone shape of the interior of the Head and plotted a best-fit line through the points. (Kurtz Rep. at 11.) "The taper angle was then estimated from the gradient of the . . . line." (*Id.*) The radii measurements Dr. Kurtz obtained were not included as part of Dr. Kurtz's report (see Kurtz Rep.), but they were introduced as Exhibit 2 during his deposition on August 6, 2013. (Kurtz Dep., Ex. C to Zimmer Inc.'s Statement of Undisputed Facts in Supp. of Its Mot. for Summ. J. [43-3], 370:11–16.)

### **III. Dr. Medlin's supplemental expert disclosure and additional affidavits**

Sometime after August 6, 2013, Plaintiff's attorneys obtained a copy of Dr. Kurtz's deposition transcript and sent it with the corresponding exhibits to Dr. Medlin for review. (Pl.'s Resp. to Def.'s Mot. to Strike the Affs. of Dana Medlin, Ph.D. [74], hereinafter "Pl.'s Resp. to Mot. to Strike," 2.) On September 5, 2013—one day before the deadline for dispositive motions—Plaintiff filed the following supplemental disclosure:

Dr. Dana J. Medlin has reviewed Kurtz Deposition Group Exhibit #2. The data in this exhibit is a further basis for Dr. Medlin's opinions, specifically his opinion that a mismatch of the taper diameter existed between the bore and trunnion in the Plaintiff's device, and that the diameter of this bore is outside the acceptable tolerances (as determined from the measurements on ZIM/BAL 001732).<sup>3</sup>

(Pl.'s First Supplemental R. 26(a)(2) Expert Disclosure, Ex. A to Zimmer Mem. in Supp. of Mot. to Strike [69-1], hereinafter "Supplemental Disclosure.") Plaintiff did not attach any supporting

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<sup>3</sup> The parties repeatedly reference "ZIM/BAL 001732," which purportedly provides Zimmer's manufacturing tolerances for the femoral Head, but have not directed the court to the location of this document in the record. Plaintiff states that the document is included as part of "Doc. #54-5" (Pl.'s Resp. to Mot. to Strike at 2), but the court is unable to locate "ZIM/BAL 001732." "Doc 54-5" is the placeholder for Dr. Medlin's affidavit in response to the summary judgment motion, which was filed under seal at Docket No. 53-7. (See Medlin Aff., Ex. E to Pl.'s Resp. to Zimmer SOF [53-7], hereinafter "Calculations Aff.") Plaintiff has included, attached to Dr. Medlin's Calculations Affidavit, a document labeled "ZIM/BAL 001735" that includes design specifications for the femoral head. (Calculations Aff. at 10.) Despite the statement in Plaintiff's supplemental disclosure, it appears that Dr. Medlin relied on ZIM/BAL 001735 to obtain the measurements of Zimmer's specifications of the Head. The court, therefore, refers to ZIM/BAL 001735 where the parties have referenced ZIM/BAL 001732.

documentation. Instead, on October 15, 2013, in response to Zimmer's motion to exclude and its motion for summary judgment, Plaintiff submitted two additional affidavits from Dr. Medlin, one attached to her response to the motion to exclude and the other attached to her response to the Motion for Summary Judgment.

The affidavit attached to the motion to exclude ("Articles Affidavit") includes eight short paragraphs which elaborate on the methodology Dr. Medlin used in his initial report. (Medlin Aff., Ex. B to Pl.'s Resp. to Mot. to Exclude [55-3], hereinafter "Articles Aff.") Attached to the affidavit are several peer-reviewed, scientific articles which utilize visual examinations, microscopy, stereomicroscopy, and scanning electron microscopy to assess damage on explanted orthopedic components. (Reference List, Ex. 1 to Articles Aff.) Dr. Medlin asserts that these articles show there is no accepted methodology for determining pre-implantation dimensions based on measurements taken post-implantation. (Articles Aff. at ¶ 5.) He also reiterated his opinion that any attempt to determine pre-implantation dimensions would be unreliable, given the amount of damage to Mrs. Ballard's component. (*Id.* at ¶¶ 6–8.)

Dr. Medlin's affidavit submitted in response to Zimmer's summary judgment motion ("Calculations Affidavit") is more complex. (Medlin Aff., Ex. E to Pl.'s Resp. to Zimmer SOF [53-7], hereinafter "Calculations Aff.") The Calculations Affidavit states that—assuming Dr. Kurtz's radii measurements are accurate representations of the pre-implantation dimensions of the Head—simple extrapolations from his data show that the Head was outside Zimmer's specifications. (Calculations Aff. ¶¶ 16–19.) Dr. Kurtz measured the radius of the Head at six different locations along its vertical axis and then used those radii measurements to estimate the taper angle. (Kurtz Rep. at 11; Kurtz. Dep. at 165:3–18.) He compared the taper angle he calculated to Zimmer's specifications and concluded that the taper angle on Mrs. Ballard's component was within specifications. Although Dr. Kurtz had measurements of the radius (and therefore could easily have calculated the diameter) he did not compare these radii measurements to Zimmer's diameter specifications. (See *generally* Kurtz Rep. at 11.)

Zimmer's specifications only list the diameter of the Head at the smallest (deepest) end and the largest end (the mouth). (See ZIM/BAL 001735, Calculations Aff. at 10.) Though Dr. Kurtz was able to measure the radius of the Head at six different locations along its vertical axis, from the mouth to the deepest end (see Kurtz Dep., Ex. C to Pl.'s Resp. to Def.'s SOF [53-4], 382:16–23), he could not compare those measurements to Zimmer's specifications because those specifications do not set forth the intended diameter of the Head at the six locations measured by Dr. Kurtz. (See ZIM/BAL 001735, Calculations Aff. at 10.)

In the Calculations Affidavit, Dr. Medlin calculated the diameter specifications that would correspond with Dr. Kurtz's measurements. Dr. Medlin used Zimmer's reported specifications for the taper angle and five<sup>4</sup> of Dr. Kurtz's different Talyrond positions along the vertical axis of the Head. (Calculations Aff. ¶¶ 4–17.) Dr. Medlin plugged those numbers into the tangent equation to determine the "radius increase" at each of the five Talyrond positions where Dr. Kurtz took his measurements. (*Id.* ¶¶ 9–10.) To calculate the expected diameter at each of the five vertical axis positions, Dr. Medlin added the calculated "radius increase" to the specified diameter measurement of the Head at its narrowest point. (*Id.* ¶¶ 13–15.) He was then able to compare Dr. Kurtz's actual measurements against the values that his tangent equation generated. (*Id.* at ¶ 18.) When Dr. Medlin performed that comparison, he concluded that the diameter of Mrs. Ballard's femoral Head was larger than Zimmer's specifications would allow. (*Id.* ¶¶ 18–19.)

### **DISCUSSION**

Zimmer moves to strike the two additional affidavits submitted by Dr. Medlin. (Mot. to Strike [68]). Zimmer urges they are untimely and even if timely, the Calculations Affidavit is

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<sup>4</sup> Dr. Medlin states in his affidavit that Dr. Kurtz used only five of his six total radii measurements (See Calculations Affidavit ¶ 3), but Dr. Kurtz's report and deposition testimony state that he used all six measurements. (See Kurtz Rep. at 3 ("a series of six circumferential roundness profiles [were] measured at 1.9 mm vertical increments on the surface of the taper"); Kurtz Dep. at 145:17–23 ("Q: . . . Why did you take six circumferential roundness profiles of the device? A: Because we wanted to recreate the taper angle, any by making enough axial measurements . . . you can reconstruct the angle.").)



nonetheless inadmissible because it is unreliable under the standards in Federal Rule of Evidence 702 and the Supreme Court's decision in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 592–93 (1993). (See Def.'s Mem. in Supp. of Mot. to Strike. at 3, 6, 8.) Zimmer also seeks to exclude the remainder of Dr. Medlin's opinions and testimony on the basis that they do not satisfy Rule 702 or *Daubert*. (Mot. to Exclude Opinions and Testimony of Plaintiff's Expert Dana Medlin, Ph.D. [44].) As explained below, the motion to strike is denied because the affidavits are timely, and even if tardy, admitting the affidavits will not prejudice Zimmer. On the current record, however, the court cannot determine whether the affidavits are sufficiently reliable and requires a hearing to complete its *Daubert* analysis.

#### **I. Motion to Strike**

Rule 26(a)(2)(B) provides that expert witnesses must prepare and sign a written report containing a complete statement of all opinions to be expressed. FED. R. CIV. P. 26(a)(2)(B). The statement must provide the basis and reasons for the opinions, the data the expert considered in reaching the opinion, the witness's qualifications, and other specified information. *Id.* Rule 26(e)(1) provides that if any correction or addition is necessary for complete disclosure of an expert opinion, that process must take place before the time for disclosure has expired under Rule 26(a)(3). FED. R. CIV. P. 26(e)(1). The sanction for failing to abide by these rules can be substantial: Rule 37(c)(1) states that “[a] party that without substantial justification fails to disclose information required by Rule 26(a) or 26(e)(1) . . . is not, unless such failure is harmless, permitted to use as evidence at trial, at a hearing, or on a motion any witness or information not so disclosed.” FED. R. CIV. P. 37(c)(1). Courts consider four factors to determine if a failure to timely disclose was harmless: “(1) the prejudice or surprise to the party against whom the evidence is offered; (2) the ability of the party to cure the prejudice; (3) the likelihood of disruption to the trial; and (4) the bad faith or willfulness involved in not disclosing the evidence at an earlier date.” *Tribble v. Evangelides*, 670 F.3d 753, 760 (7th Cir. 2012), as amended (Feb. 2, 2012).

## **A. Timeliness**

Zimmer urges that the affidavits are untimely because they were submitted after the deadline for Plaintiff's expert disclosures (April 15, 2013) and after the deadline for dispositive motions (September 6, 2013). (Def.'s Reply in Supp. of Mot. to Strike [77], 2.) Plaintiff acknowledges that the affidavits were submitted after these two deadlines but argues that they are nonetheless timely because they are supplemental disclosures under Rule 26(e) based on new information that was not available to the Plaintiff before these deadlines. (Pl.'s Resp. to Mot. to Strike at 5; FED. R. CIV. P. 26(e).) Supplemental disclosures must be submitted by the time that pretrial disclosures are due, FED. R. CIV. P. 26(e)(2), which is either the date ordered by the court or, if there is no court order, 30 days before trial. FED. R. CIV. P. 26(a)(3)(B). The supplemental affidavits are timely, Plaintiff continues, because although there was a court-ordered deadline for pre-trial disclosures, it was vacated (see June 13, 2012 Minute Entry [24]),<sup>5</sup> and no new date was set. (Pl.'s Resp. to Mot. to Strike at 9–10.) There is no trial date, Plaintiff continues, so the affidavits were necessarily disclosed more than 30-days before trial. (*Id.*)

The court agrees that if the affidavits are properly characterized as supplements, they are timely. Zimmer urges that the affidavits are not supplements because they represent new opinions that contradict Dr. Medlin's earlier opinions. (Def.'s Mem. in Supp. of Mot. to Strike at 6; Def.'s Reply in Supp. of Mot. to Strike at 3.) To determine whether Dr. Medlin's affidavits are fairly understood as supplements, the court examines each of them below.

### **1. Articles Affidavit: in response to motion to exclude**

The Articles Affidavit offers no new opinions: Dr. Medlin merely provides additional citations to scholarly articles that support his methodology and criticizes Dr. Kurtz's method of estimating pre-implantation dimensions. Zimmer attempts to manufacture a contradiction by

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<sup>5</sup> The court did set September 27, 2013 as the deadline for a Joint Final Pretrial Order, but Zimmer has not argued that this date served as a deadline for pre-trial disclosures for the purposes of Rule 26(a)(3)(B) and has conceded there is no court-ordered deadline for pre-trial disclosures. (See Def.'s Reply in Supp. of Mot. to Strike at 2–3.)

contrasting Dr. Medlin's statement in the Articles Affidavit that he does "not believe that it is possible to determine with accuracy the pre-implantation, starting-point dimensions of the [Head] based on measurements taken post-explantation" (Articles Aff. ¶ 7), with his earlier deposition testimony that he would have liked to take internal measurements of the Head but did not have the equipment to do so. (Def.'s Mem. in Supp. of Mot. to Strike at 6–7.) Dr. Medlin's Articles Affidavit, Zimmer continues, is an improper attempt to "to revise his stated reason for not performing the" measurements and bolster his original methodology. (*Id.* at 7.) Dr. Medlin's criticism of the post-explanation measurements, however, is not new or in any way a "revision": he repeatedly expressed this opinion during his deposition. (Medlin Dep. at 56:15–19, 77:12–22, 137:19–23.) Furthermore, despite Zimmer's framing, the two statements are not inherently contradictory. It is plausible that Dr. Medlin would want to take measurements even if they are not a reliable indicator of pre-implantation dimensions: for example, if the diameter of the Head, after explantation, is smaller than the specifications would allow, that could provide strong evidence that the Head was out of specifications when implanted, since the damage to the Head would only make the diameter larger. The measurements still might not reliably show what the pre-implantation dimensions were, but the post-explanation measurements would remain relevant. Because the affidavit contains no new opinions, it is appropriately characterized as a supplemental disclosure.

## **2. Calculations Affidavit: in response to motion for summary judgment**

The Calculations Affidavit presents a closer question. Zimmer argues that the affidavit contradicts Dr. Medlin's initial report and deposition testimony because the Calculations Affidavit extrapolates from Dr. Kurtz's radii measurements, which Dr. Medlin earlier criticized as unreliable. (Def.'s Reply in Supp. of Mot. to Strike at 4–5.) Again, however, these opinions can be harmonized. In his first report, Dr. Medlin explained that he believed the cause of the micro-motion was a mismatch between either the taper angle or the diameter of the Head and Stem. (Medlin Rep. at 7.) He explained that a mismatch likely occurred because (1) the two parts

were at the extreme ends of the tolerated specifications or (2) one piece was within specifications and the other was outside specifications. (*Id.* at 7–8.) In his initial report, Dr. Medlin did not specify whether he believed the Head was in or out of specifications because he did not have the equipment to evaluate its dimensions. Dr. Kurtz then used more sophisticated equipment than Dr. Medlin had available to measure the inside of the Head at six different intervals along its vertical axis. Dr. Kurtz asserts that these are reliable estimates of the pre-implantation radius at each of the six points. (Kurtz Dep. at 139:5–18, 156:3–21.)

In the Calculations Affidavit, Dr. Medlin calculates Zimmer's expected radius specifications at each of the six Talyrond positions. He then compared Dr. Kurtz's actual measurements to the expected specifications and concluded that Dr. Kurtz's measurements are larger than what Zimmer's specifications would allow. (*Id.* ¶¶ 17–18.) Dr. Medlin's Calculations Affidavit, therefore, is an effort to rebut Dr. Kurtz's opinion in the event that the court (or a fact-finder) concludes that Dr. Kurtz's measurements are reliable. The court does not see this as a contradiction from Dr. Medlin's earlier position that the measurements are unreliable.

Plaintiff maintains that the affidavit does not offer any new opinions because it reaches the same conclusion as Dr. Medlin's initial reports: that the diameter of the Head was out of specification. (Pl.'s Resp. to Mot. to Strike at 6–9.) Even assuming that the conclusion is the same, however, Zimmer is correct that the methodology and data on which that conclusion is based are different, and the Calculations Affidavit, accordingly, is technically a new opinion. *See Only The First, Ltd v. Seiko Epson Corp.*, 822 F. Supp. 2d 767, 781 (N.D. Ill. 2011) (same conclusion based on new testing constitutes a new opinion). The court nevertheless agrees with Plaintiff that Dr. Medlin's new opinion is based on information that was not available when his first expert report was filed on April 15, 2013—specifically, the radii measurements that Dr. Kurtz disclosed at his deposition on August 6, 2013. The affidavit is properly considered a supplement to Dr. Medlin's earlier report because it is based on information that was not

available at the time of the initial disclosure. Accordingly, both affidavits are properly characterized as supplements and are timely under Rule 26(a)(3).

**B. Admitting the affidavits will not prejudice Zimmer**

The court concludes, further, that even if the affidavits are found to be untimely, Plaintiff's failure to disclose them earlier is harmless. Zimmer's contention that it suffered prejudice from the delayed disclosure is unpersuasive. Zimmer asserts that it was unable to question Dr. Medlin at his deposition about the opinions contained in the affidavits. (Def.'s Reply in Supp. of Mot. to Strike at 6–8). Zimmer was, however, able to question Dr. Medlin about his methodology based on his initial report and has not explained what questions the Articles Affidavit raised that Zimmer did not already ask during Dr. Medlin's deposition. With respect to the Calculations Affidavit, as explained above, Dr. Kurtz and Defendant did not disclose the data used in that affidavit until after Dr. Medlin's deposition was complete: Plaintiff could not possibly have disclosed the opinions in the Calculations Affidavit before Dr. Medlin's deposition. Zimmer is free to seek leave to re-depose him on those opinions.

Zimmer next argues that it is prejudicial to permit the affidavit to be submitted after it filed its motion for summary judgment and that Plaintiff should have submitted the affidavits with Plaintiff's supplemental expert disclosure. (Def.'s Reply in Supp. of Mot. to Strike at 3.) The court agrees that the best course of action would have been for Plaintiff to submit the affidavit with her supplemental expert disclosure on September 5, 2013. Nonetheless, considering the affidavit at this stage will not prejudice Zimmer. First, Zimmer should not be surprised by the calculations: Dr. Kurtz himself acknowledged that such extrapolations from the data are possible (see Kurtz Dep., 218:17–219:12), and Dr. Medlin's initial report put Defendant on notice that his theory included the possibility that one of the components was outside specifications. Zimmer was, therefore, on notice of this possible response to Dr. Kurtz's report. The fact that this affidavit is a response to Dr. Kurtz distinguishes this situation from *Alper v. Alzheimer & Gray*, where plaintiff's supplemental expert report included "a new and different damage calculation."

No. 97-cv-1200, 2002 WL 31133287 (N.D. Ill. Sept. 26, 2002). In *Alper*, this court concluded that the supplement should be stricken because it was a new theory, not previously disclosed "and does not constitute rebuttal." (*Id.*) Here, on the other hand, Dr. Medlin's affidavit is a rebuttal to Dr. Kurtz, not a belated new theory.

Zimmer has also already had the opportunity to respond to the affidavits through its reply brief, and accordingly has not been prejudiced. See *Berman v. Stryker Corp.*, No. 11-cv-1309, 2013 WL 5348324, \*2 (N.D. Ill. Sept. 24, 2013) (refusing to strike supplemental affidavit because "through its reply, defendant has had a full opportunity to address the supplement and affidavit."). Zimmer's reliance on *Brown v. Primerica Life Insurance Co.*, No. 02-cv-8175, 2006 WL 1155878 (N.D. Ill. Apr. 29, 2006), does not alter this conclusion. In *Brown*, the court agreed to strike a supplemental report that was submitted with a reply brief, leaving the opposing party no opportunity to respond. *Id.* at \*1–\*2 (noting that defendant's "inability to explore [expert]'s assertions or counter them precludes any possibility that the failure could be deemed harmless."). Unlike in *Brown*, Zimmer was able to respond to the affidavits in its reply briefing, and even submitted an additional affidavit from Dr. Kurtz to challenge Dr. Medlin's calculations. (See Kurtz Aff., Ex. A to Zimmer Reply Mem. in Supp. of Mot to Exclude [67-1], hereinafter "Kurtz Aff.")

Moreover, any remaining prejudice to Zimmer is curable. The Seventh Circuit has recognized "the propriety of . . . measures to correct Rule 26 violations." *Gicla v. United States*, 572 F.3d 407, 408 (7th Cir. 2009). In *Gicla*, a medical malpractice action, the district court allowed defendant's expert to testify despite defendant's failure to disclose that the expert had reviewed new x-rays the morning of trial. *Id.* at 408–09. The Seventh Circuit acknowledged that plaintiff's attorneys had prepared a cross-examination strategy based on the fact that the expert had not reviewed the x-rays, but reasoned that the district court's offer to take a break so that plaintiff's counsel could re-work their cross-examination strategy and contact their expert cured any unfair surprise. *Id.* at 412. Here, Zimmer had a greater opportunity to respond:

Zimmer has been able to consult its expert and respond to Dr. Medlin's affidavits and will have the opportunity to question Dr. Medlin regarding all of his methods and opinions—including the new opinions in the Calculations Affidavit—at a *Daubert* hearing.

## **II. *Daubert* analysis**

Zimmer urges this court to reject all of Dr. Medlin's testimony because it is unreliable under the standards set out in Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 592–93 (1993).<sup>6</sup> (See Mem. in Supp. of Mot. to Strike Medlin Affs. [69], at 3, 6, 8; Mot. to Exclude Opinions and Testimony of Plaintiff's Expert Dana Medlin, Ph.D. [44].) In *Daubert*, the Supreme Court explained that district courts must ensure that the reasoning or methodology employed by an expert is reliable before admitting that testimony. 509 U.S. at 592–93. On this record, the court cannot determine whether Dr. Medlin's use of trigonometric functions to calculate Zimmer's intended diameter of the Head was sufficiently reliable. First, the court notes Dr. Kurtz's assertion that Dr. Medlin's approach has not been validated. (Kurtz Aff. ¶ 6.) The court is uncertain how serious this concern is; Dr. Kurtz himself appears to have used trigonometry to calculate the taper angle based on the measured radius of the Head. (See Kurtz. Dep. at 165:3–18.) (The taper angle is calculated by "fit[ting] a line through the radius, which gives you the slope, which is the taper slope. And then you can convert the taper slope here into an angle. And that's how you calculate the taper angle.") Dr. Kurtz also stated that he could determine the diameter at other heights on the Head—without taking more measurements—through calculations and compare those calculations to Zimmer's specifications. (Kurtz Dep. at 218:17–219:12.) The court is uncertain why the use of trigonometric functions would be reliable to calculate some of the Head's dimensions but not others, and believes that testimony on this point would be elucidating.

In addition, the court has some concerns about the specific calculations Dr. Medlin used. For example, to calculate Zimmer's expected diameter (and minimum and maximum tolerances)

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<sup>6</sup> Zimmer does not dispute that Dr. Medlin is qualified.

at the various Talyrond positions, Dr. Medlin added the "radius increase" he had calculated to the internal diameter of the Head at its deepest point (the small-end diameter). (Calculations Aff. ¶ 13.) Yet, as Dr. Medlin notes elsewhere, a diameter is twice the length of the radius (*id.* ¶ 16), implying that to calculate the intended diameter at each of the six Talyrond positions he would need to add twice the "radius increase" to the small-end diameter. The court, accordingly, requires clarification on the terminology and approach Dr. Medlin used and how his terms correspond to the various dimensions of the Head.

### **CONCLUSION**

The court denies Zimmer's motion to strike Dr. Medlin's affidavits [68] because considering the affidavits does not prejudice to Zimmer. On the current record, however, the court cannot determine whether the affidavits are sufficiently reliable, and accordingly will schedule a *Daubert* hearing to resolve these questions.

ENTER:

A handwritten signature in black ink, appearing to read "Rebecca R. Pallmeyer", with a long horizontal flourish extending to the right.

Dated: January 7, 2015

REBECCA R. PALLMEYER  
United States District Judge